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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,437	04/16/2004	Eduardo L. Quioc	5702-01051	1043
<div>7590 08/01/2007 L.C. Begin & Associates, PLLC PMB 403 510 Highland Avenue Milford, MI 48381</div>			<div>EXAMINER CULBRETH, ERIC D</div>	
			<div>ART UNIT 3616</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 08/01/2007</div>	<div>DELIVERY MODE PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/826,437

Applicant(s)

QUIOC ET AL.

Examiner

Eric Culbreth

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the final Office action and the appeal brief filed 4/23/07 persuasive and, therefore, the finality of that action is withdrawn.

2. Following is an action on the merits of the application.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 26 and 29-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 26, line 2 there is no antecedent basis for "said space" (the space was recited in claim 25, and claim 26 depends from claim 23).

In claim 29 there is no antecedent basis for "said filter member" as a filter was previously recited.

In claim 30, there is no antecedent basis for "said filter" as a filter member was earlier recited in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 7, 9-10, 13, 30-31 and 33-34 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Kirchoff et al (US 3,972,545, of record).

Kirchoff discloses an inflator 5 for an inflatable restraint system in a vehicle (first two lines of abstract) comprising an inflator housing or body 6 having first and second ends and an inner peripheral wall, a tube or booster cup 34 extending in the body and having an outer peripheral wall and an end surface extending inwardly from the outer peripheral wall. The booster cup has a first propellant charge or pyrotechnic 21 positioned therein. The inner peripheral wall and outer peripheral wall are separated by a substantially annular space 16, 17 having a second propellant charge 18 positioned therein. An initiator assembly or squib 19 is disposed proximate the first end and operable to ignite the first charge 21. A filter 22, 26, 28, 29, 30, 32 abuts the booster cup end surface and a perforated disk 31 abuts the filter (as functionally recited, not only filters 22 and 32, but also pH neutralizer 26 and coolers 28 and 29 would remove or filter particulates, as neutralizer 26 has powder and coolers 28, 29 and 32 have coarse wire). A nozzle or annulus housing 33 is positioned at the second end of the body and abuts the perforated disc, the nozzle defining a nozzle outlet for supplying inflation gas to the restraint system (note column 4, lines 15-16, where gas passes

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through the perforated plate and perforated annulus 33 into the discharge orifice 13, and the cross section of annulus 33 in the figure, where there is an outlet or nozzle in communication with the outlet 13)(claim 7). The filter has a length of one-fourth to one-half the total length of the body upon inspection of the figure (claim 9). As indicated by the phantom lines inside tube 34, the tube is cylindrical and as illustrated is coaxial substantial with the inflator body (claim 10). Regarding claim 13, Kirchoff et al's filter is substantially cylindrical (i.e., the body is cylindrical to allow screwing on at threads 11, and hence the filter is cylindrical) at its periphery positioned adjacent the inner peripheral wall. The filter has a substantially planar end positioned flush with the cup end surface. The product (inflator) would be assembled by the steps of claim 30 (positioning a booster cup, placing a charge in the space between the booster cup and body, inserting the filter then disc, and positioning a nozzle member in the inflator body constraining the filter and charge from movement) (claims 30 and 34). Charge 18 in the space is in the form of tablets (claim 31), and as functionally recited in claim 33 the filter length is sized to reduce or increase a gas pressure resulting from activation of gas generator (i.e., this is a functional limitation of intended use; the filter would do one or the other).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-6, 11-12, 14-21, 27-29 and 32 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirchoff et al in view of Goetz et al US 4,394,033 (newly cited).

Kirchoff et al does not disclose an apertured wall for the booster cup. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kirchoff et al to include an apertured outer wall on the booster cup or initiator tube because the substitution of Goetz's perforated tube for Kirchoff et al's rupturing tube would have yielded the predictable result of gases from the booster material contacting the tablets to one of ordinary skill in the art at the time of the invention (claims 1-6, 11, 14, 18-19, and 27-29; the other features of these claims are in Kirchoff et al, as discussed in the 35 USC 102 rejection above). Regarding claims 12 and 32, the annular space in Kirchoff et al containing tablets 18 extends longitudinally from the body first end to a point substantially coplanar with the cup end surface. Regarding

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claims 15-17, Kirchoff et al's tablets 18 are "stacked" adjacently in the annular space with cylindrical axes oriented perpendicular to the inner peripheral wall. Forming annulus 33 and adapter 12 as integral (hence as a threaded nozzle engaged with the inflator body and the perforated plate) would be an obvious matter of design choice, as parts are integral if they are rigidly secured together as a single unit; at any rate, the use of a one piece construction instead of a separate pieces is a matter of obvious engineering design choice (In re Fridolph, 50 CCPA 745, 89 F.2d 509, 135 USPQ 319). The inflatable restraint in Kirchoff et al is an airbag (lines 1-2 of the abstract), and the booster cup or tube 34 is connected to the initiator body or squib holder for squib 19 such that it is suspended from the initiator body and supported only by attachment to the initiator body inasmuch as applicant's invention (claims 20-21).

10. Claims 22-26 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirchoff et al in view of Goetz as applied to claim 14 above, and further in view of Schneider et al US006279945B1, of record.

The features of claims 22-26 are found in the combination of Kirchoff et al and Goetz above, except for an airbelt. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kirchoff et al and Goetz above to include the inflator on an airbelt in order to decrease the focusing of loads in the seat belt (Schneider et al, column 1, lines 49-57).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Culbreth
Primary Examiner
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